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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/807,057	04/06/2001	Roger John Leach	COLGRAP23AUS	4301

7590

04/28/2003

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EXAMINER

GOFF II, JOHN L

ART UNIT

PAPER NUMBER

1733

DATE MAILED: 04/28/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/807,057

Applicant(s)

LEACH, ROGER JOHN

Examiner

John L. Goff

Art Unit

1733

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 25 February 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 10, 13-15 and 19-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 10, 13-15 and 19-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 October 1999 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

Art Unit: 1733

### DETAILED ACTION

1. This action is in response to Amendment B received on 2/25/03. The previous objections to the specification have been overcome.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

#### *Claim Rejections - 35 USC § 103*

3. Claims 10, 13-15, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Creighton et al. (U.S. Patent 4,004,061) in view of Akzo (EP 525867).

Creighton et al. are directed to adhesive bonding or lamination of two substrates via the interposition therebetween of an adhesive intermediary composed of an adhesive film composed of two superposed, separate and distinct layers of two different curable thermosetting resins. Creighton et al. teach applying a first thermosettable resin layer in liquid form onto a substrate, applying a second thermosettable resin layer in powder/particulate form onto the first layer wherein the second resin has a lower rate of cure than the first resin, and applying curing energy (i.e. heat) to both layers fusing them together such that the first resin layer partially cures and the second resin layer does not substantially cure. Creighton et al. further teach using the adhesive film to bond together two substrates wherein the bonding surface of one or both of the substrates has a further layer of thermoset resin composition in the form a film or a powder/particulate, and the bonding occurs under heat and pressure to cure the resin layers (Column 1, lines 50-68 and Column 2, lines 1-2, 7-14, and 21-26 and Column 3, lines 54-62). Creighton et al. are silent as to

Art Unit: 1733

applying the first resin in a powder/particulate form. However, it is noted Creighton et al. do not exclude applying the first resin in other forms such as a powder form (Column 54-58). Absent any unexpected results, it would have been well within the purview of one of ordinary skill in the art at the time the invention was made to apply the first resin taught by Creighton et al. in a powder form (i.e. instead of a liquid form) as it was well known and conventional in the art to apply the resin in either form as shown for example by Akzo.

Akzo is directed to a two-layer coating system comprising applying a first thermosettable resin layer in a powder/particulate form to a substrate, applying a second/different thermosettable resin layer in a powder form onto the first layer, and curing both layers after their application while they are in the powder form. It is noted Akzo teaches the first resin layer may also be applied in a liquid form. Akzo further teaches the resin layers may include pigmentation and the second resin layer may be transparent (Column 1, lines 41-55 and Column 3, lines 31-37 and Column 4, lines 10-12 and 25-33 and Column 5, lines 3-5).

Regarding claim 14, it is noted Creighton et al. suggest the resin layers may include additional additives. One of ordinary skill in the art at the time the invention was made would have readily appreciated including in the either or both of the resin layers taught by Creighton et al. pigmentation to give the resin layers color as was well known in the art as shown for example by Akzo. Further, regarding claim 15 one of ordinary skill in the art at the time the invention was made would have readily appreciated the second resin layer being transparent when the first layer includes a pigment so that the pigment is visible as was known in the art as shown for example by Akzo.

Art Unit: 1733

4. Claims 20 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Creighton et al. and Akzo as applied to above in paragraph 3, and further in view of Wallace (U.S. Patent 3,991,005).

Creighton et al. and Akzo as applied above teach all of the limitations in claims 20 and 23 except for a specific teaching of the second thermosetting resin comprising polyethylene or polyester. It is noted Creighton et al. teach the first and second resins are not limited to any particular thermosetting resin. Creighton et al. further teach the first resin comprises thermosetting resins such as epoxy and polyester (Column 2, lines 49-54). One of ordinary skill in the art at the time the invention was made would have readily appreciated using as the second thermosetting resin layer taught by Creighton et al. as modified by Akzo polyethylene or polyester as these were well known and conventional thermosetting resins as shown for example by Wallace.

Wallace is directed to a structural adhesive comprising a thermosetting resin such as epoxy, polyesters, and polyethylene (Column 6, lines 8-20).

5. Claims 21, 22, 24 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Creighton et al. and Akzo as applied to above in paragraph 3, and further in view of Sano et al. (U.S. Patent 5,530,036).

Creighton et al. and Akzo as applied above teach all of the limitations in claims 21, 22, 24, and 25 except for a teaching of using an adhesion promoter. One of ordinary skill in the art at the time the invention was made would have readily appreciated using an adhesion promoter such as silane with an acid component in the first resin layer taught by Creighton et al. as

Art Unit: 1733

modified by Akzo to increase the adhesiveness of the first resin layer as adhesion promoters were well known in the art as shown for example by Sano et al.

Sano et al. are directed to a thermosetting resin composition. Sano et al. teach using an adhesion promoter to improve the adhesion of the composition to a substrate. Sano et al. teach the adhesion promoter comprises a silane-coupling agent including an acid component (Column 11, lines 25-40).

### *Response to Arguments*

6. Applicant's arguments with respect to claims 10, 13-15, and 19-25 have been considered but are moot in view of the new ground(s) of rejection. Applicant argues Creighton et al. do not teach or suggest the depositing of first and second layers as separate layers wherein both layers are in powder form. It is noted Creighton et al. teach the first and second layers are deposited as separate layers (Column 1, lines 50-57), and Akzo has been applied with Creighton et al. to show it is known and conventional to apply the layers in a powder or liquid form.

### *Conclusion*

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after


Art Unit: 1733


the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **John L. Goff** whose telephone number is **703-305-7481**. The examiner can normally be reached on M-Th (8 - 5) and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Ball can be reached on 703-308-2058. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

  
John L. Goff  
April 24, 2003

  
Michael W. Ball  
Supervisory Patent Examiner  
Technology Center 1700